



# **BISON CONTROL AREA PROGRAM ANNUAL REPORT 2016/2017 – 2019/2020**

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## ABSTRACT

Bovine tuberculosis (*Mycobacterium bovis*) and brucellosis (*Brucella abortus*) are endemic in bison (*Bison bison*) herds in and around Wood Buffalo National Park, and the adjacent Slave River Lowlands. In 1987, the Bison Control Area, and a surveillance program, was created to minimize the risk of disease transmission to the disease-free Mackenzie and Nahanni populations in the Northwest Territories by preventing bison from moving through or establishing herds within the area south of the Mackenzie River between the Trout and Buffalo Rivers. To keep this area free of bison, aerial surveys are flown to search for bison, and public participation by reporting any sightings or signs of bison is encouraged.

This program continued through 2016/2017 to 2019/2020 seasons with two annual survey flights.

# Table of Contents

ABSTRACT.....	ii
LIST OF FIGURES.....	iv
LIST OF TABLES.....	v
INTRODUCTION.....	1
BISON CONTROL AREA REVIEW.....	3
METHODS.....	4
RESULTS.....	6
2016/2017 .....	6
2016/2017 Bison Control Area Survey Results.....	6
2016/2017 Reports and Sightings .....	7
2017/2018 .....	8
2017/2018 Bison Control Area Survey Results.....	8
2017/2018 Reports and Sightings .....	9
2018/2019 .....	10
2018/2019 Bison Control Area Survey Results.....	10
2018/2019 Bison Control Area Reports and Sightings .....	11
2019/2020 .....	12
2019/2020 Bison Control Area Survey Results.....	12
2019/2020 Bison Control Area Reports and Sightings .....	13
PUBLIC AWARENESS.....	14
ACKNOWLEDGEMENTS.....	15
LITERATURE CITED .....	16
APPENDIX A: SUMMARY OF SURVEILLANCE ACTIVITIES AND REMOVALS OF BISON FROM THE BISON CONTROL AREA (1988/1989 – 2019/2020).....	17

# LIST OF FIGURES

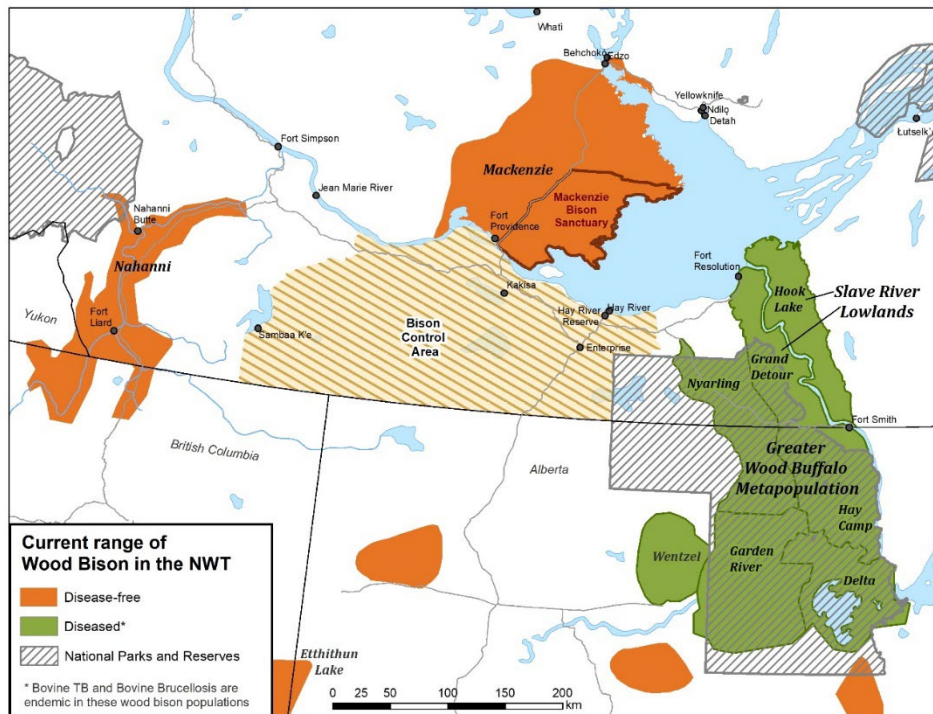
<b>Figure 1.</b> The current distribution of wood bison ( <i>Bison bison athabasca</i> ) in northern Canada. ....	1
<b>Figure 2.</b> The Bison Control Area and its stratification into three zones. ....	4
<b>Figure 3.</b> Transects for the two annual Bison Control Area aerial surveys. ....	5
<b>Figure 4.</b> Advertisement published in the 2020 NWT Explorers' Guide. ....	14

## LIST OF TABLES

<b>Table 1.</b> All recorded animal observations and tracks during the 2016/2017 Bison Control Area surveys.....	6
<b>Table 2.</b> Survey duration, weather, and observation conditions for the 2016/2017 Bison Control Area surveys.....	7
<b>Table 3.</b> All reported bison sightings in and near the Bison Control Area, 2016/2017. ....	7
<b>Table 4.</b> All recorded animal observations and tracks during the 2017/2018 Bison Control Area surveys. ....	8
<b>Table 5.</b> Survey duration, weather and observation conditions for the 2017/2018 Bison Control Area surveys.....	9
<b>Table 6.</b> All reported bison sightings in and near the Bison Control Area, 2017/2018. ....	9
<b>Table 7.</b> All recorded animal observations and tracks during the 2018/2019 Bison Control Area surveys. ....	10
<b>Table 8.</b> Survey duration, weather, and observation conditions for the 2018/2019 Bison Control Area surveys.....	11
<b>Table 9.</b> All recorded animal observations and tracks during the 2019/2020 Bison Control Area surveys. ....	12
<b>Table 10.</b> Survey duration, weather, and observation conditions for the 2019/2020 Bison Control Area surveys.....	13

# INTRODUCTION

The Bison Control Area (BCA) was established in 1987 to reduce the risk of contact between bison infected with bovine tuberculosis or brucellosis and disease-free bison in the Mackenzie, Nahanni and Hay-Zama (Alberta) populations. The two diseases are endemic in bison in the Slave River Lowlands and Wood Buffalo National Park (WBNP) (Figure 1). The BCA is intended to be a buffer zone between infected and uninfected populations to prevent the spread of disease. This zone encompasses over 39,800 km<sup>2</sup> bounded in the south by the Northwest Territories (NWT) border, in the north by the Mackenzie River and Great Slave Lake, in the west by the Trout River and in the east by the Buffalo River. All bison found within the BCA are assumed to be diseased and are removed and tested. The history of wood bison in the NWT and the disease status of bison populations in the NWT were further reviewed in previous annual reports on the Bison Control Area (BCA) (e.g. Sayine-Crawford et al. 2012, Greig and Cox 2012).



**Figure 1.** The current distribution of wood bison (*Bison bison athabasca*) in northern Canada.

Since 1993 the BCA program has been jointly funded by the Government of the Northwest Territories' Department of Environment and Climate Change (ECC) (formerly the Department of Environment and Natural Resources (ENR)) and the Government of Canada's Parks Canada Agency. Both governments realize the importance of maintaining healthy wood bison herds and promoting the growth of the species. The BCA program supports the

objectives of the national *Recovery Strategy for the Wood Bison (Bison bison athabascaae)* in Canada and the *Recovery Strategy for Wood Bison (Bison bison athabaskan)* in the Northwest Territories.

The objectives of the BCA program are to prevent bison from moving between the Slave River Lowlands/WBNP and the Mackenzie, Nahanni and Hay-Zama populations by detecting and removing any bison that may come into the area. To achieve this objective, the goals of the program are:

- Conduct aerial surveillance of the BCA twice during the winter months;
- Investigate all reports of bison in the BCA;
- Maintain the BCA free of bison and prevent any herds from establishing within its limits;
- Increase public awareness about the program; and
- Confirm disease status of any bison found in the BCA.



## BISON CONTROL AREA REVIEW

A review of the BCA program was conducted in 2016 to assess the effectiveness of the program and to identify any potential cost savings with recommendations taken into consideration for future BCA activities. The 2016/2017 surveillance season was the first year to implement the currently used survey area and methods. The recommendations for the survey methods from this review were to: (1) eliminate weekly winter shoreline patrols, (2) replace semi-comprehensive and comprehensive surveys with a revised aerial transect survey.

Surveillance efforts were modified beginning in 2016/2017 with the reduction of the aerial survey area and the removal of shoreline patrols.

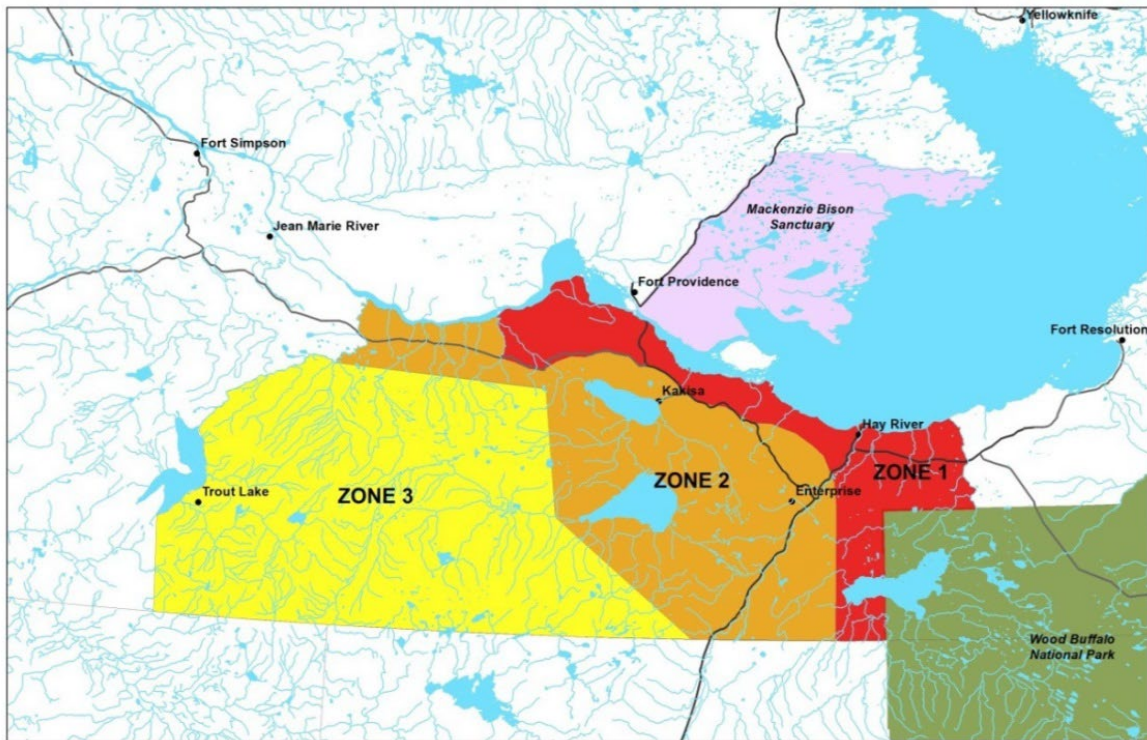
Prior to 2016/2017, weekly winter shoreline patrols were conducted along the north and south shores of the Mackenzie River in an effort to detect bison crossing the river. The review recommended discontinuing shoreline patrols for three reasons: (1) there had been few bison using habitat immediately adjacent to the Mackenzie River since 2012/2013; (2) shoreline patrols had not detected crossing events although crossing events had been detected by local residents who are active on the river during the winter; and (3) to shift focus to surveillance of the eastern boundary of the BCA, i.e., where any bison moving into the BCA could be diseased.

Prior to 2016/2017, annual semi-comprehensive and comprehensive surveys were conducted within the boundaries of the BCA. The semi-comprehensive survey did gather observations, but its design did not provide consistent coverage of the survey area. The comprehensive survey was not consistent in transect spacing and alignment, so use of the data for other purposes was more difficult than a standard survey with fixed transect widths with parallel spacing. The review recommended replacing the semi-comprehensive and comprehensive surveys with a redesigned aerial survey with systematic coverage of Zone 1 and part of Zone 2 that would be conducted twice each winter. The new survey was designed to focus on the eastern boundary of the BCA to detect potentially diseased animals moving of WBNP as opposed to non-diseased animals moving south of the Mackenzie River.

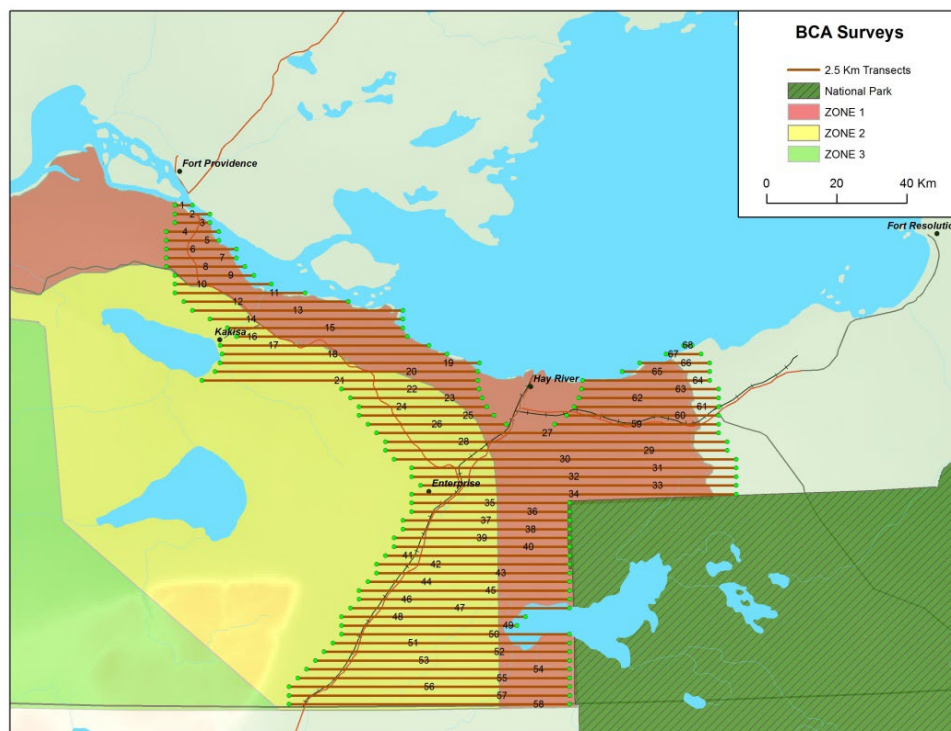
# METHODS

Survey methods were similar to those used in previous years (Gates et al. 1992, Williamson et al. 1995, Bohnet and Gates 1997, Nishi 2002, Boulanger et al. 2002, Bidwell et al. 2004, Campbell et al. 2004, Hartop et al. 2009) to ensure repeatability and comparability of wildlife sightings. The exception to this is that transect markers were not used on the windows or wings since the purpose of the BCA program is to determine presence/absence of bison and is not to conduct a population survey. Comprehensive surveys are no longer conducted in this program.

The BCA is stratified into three zones (Figure 2). Zone 1 is the area in which bison are most likely to be seen, since it is the section of the BCA that is nearest to both the Mackenzie population's range and WBNP. Therefore, the program focuses on this particular zone, with aerial surveys conducted twice a year. Zone 2 is a larger zone and part of this zone is incorporated into the annual aerial surveys (Figure 3). Surveillance of the remaining areas of Zone 1, 2 and 3 relies on reports from people living and travelling in the area instead of aerial surveys.



**Figure 1.** The Bison Control Area and its stratification into three zones.



**Figure 2.** Transects for the two annual Bison Control Area aerial surveys.

Aerial surveillance is conducted during the winter months when bison and signs of their presence (feeding craters and tracks) are most visible. Also, the probability of bison moving through the BCA is potentially higher in the winter because bison may be more likely to walk across the frozen Mackenzie River than swim across it in the summer.

Two survey flights were completed between February 15 - March 18, 2021, using a Cessna 337 from Landa Aviation Ltd. The GIS Specialist from the ENR office in Fort Smith conducted both surveys along with local community members as observers.

All tracks and wildlife observed were documented and their location recorded. The aircraft circled all suspected bison tracks so observers could examine closer to determine the type of tracks. Data was recorded on a tablet with GPS capabilities using ArcGIS Survey123.

# RESULTS

2016/2017

## 2016/2017 Bison Control Area Survey Results

**Table 1.** All recorded animal observations and tracks during the 2016/2017 Bison Control Area surveys. Survey types are titled 'semi' for semi-comprehensive and 'comp' for comprehensive.

Survey Type	Date	Moose Tracks	Moose	Caribou Tracks	Caribou	Wolf Tracks	Wolf	Kill Site
Semi	6-Feb-2017	42	6	33	9	11		
Semi	7-Feb-2017	19	3	121	28	20		
Semi	8-Feb-2017	15		64	4	18		
Semi	9-Feb-2017	16	5	30	3	26		
Semi	10-Feb-2017	28	12	120	6	31	4	
Semi	11-Feb-2017	27	2	49	6	36		
Comp	21-Mar-2017	103	4	15	10	136		
Comp	23-Mar-2017	91	3	64	7	79		
Comp	27-Mar-2017	79	3	90		243		
Comp	28-Mar-2017	2	2			17		
Comp	31-Mar-2017	91	4	21	5	1	1	
	<b>Total</b>	<b>513</b>	<b>44</b>	<b>607</b>	<b>78</b>	<b>618</b>	<b>5</b>	<b>0</b>

**Table 2.** Survey duration, weather, and observation conditions for the 2016/2017 Bison Control Area surveys. Survey types are titled ‘semi’ for semi-comprehensive and ‘comp’ for comprehensive.

Survey Type	Date	Hours Flown	Temperature	Wind (Direction-knots)	Sky	Light	Intensity	Snow Cover	Days Since Last Snow
Semi	6-Feb-2017	3.3	-29.0	WNW-6kts	Clear	Bright	High	Complete	
Semi	7-Feb-2017	5.6	-20.0	NW-9kts			Medium	Complete	<12hr
Semi	8-Feb-2017	6.4	-20.0	NA-5kts	Clear	Bright	High	Complete	1
Semi	9-Feb-2017	6.4	-18.0	NA-5kts	Overcast	Bright	Medium	Complete	2
Semi	10-Feb-2017	6.8	-25.0	NE-8kts	Clear	Bright	High	Complete	3
Semi	11-Feb-2017	3.3	NA	W-6kts	Clear	Bright	High	Complete	<12hr
Comp	21-Mar-2017	5.9	-16.0	S-4kts	Partly cloudy				
Comp	23-Mar-2017	7.2	-19.0	ENE - 10kts	Few Clouds				
Comp	27-Mar-2017	7.1	-11.0	WNW - 8kts	Few Clouds				
Comp	28-Mar-2017	1.6	-10.0	ENE - 9kts	Clouds broken				
Comp	31-Mar-2017	8.4	1.0	SSE - 10kts	Broken				
<b>Total</b>		<b>62.0</b>							

## 2016/2017 Reports and Sightings

**Table 3.** All reported bison sightings in and near the Bison Control Area, 2016/2017.

Report/Sighting Date	Details
13-Jan-2017	Fort Providence RRO received a report of approximately five bison had been sighted on Highway 1, at a gravel pit near km 220. The site was investigated but it had snowed and no bison or tracks were located. On January 16, the site and highway between km 188 and km 248 were searched; no bison tracks were located.
5-Mar-2017	A member of the public reported a bison on the north side of Highway 1, west of the Redknife River, near km 306. The site was investigated, but no bison or bison tracks were found.

## 2017/2018

### 2017/2018 Bison Control Area Survey Results

**Table 4.** All recorded animal observations and tracks during the 2017/2018 Bison Control Area surveys. Survey types are titled 'semi' for semi-comprehensive and 'comp' for comprehensive.

<b>Survey Type</b>	<b>Date</b>	<b>Moose Tracks</b>	<b>Moose</b>	<b>Caribou Tracks</b>	<b>Caribou</b>	<b>Wolf Tracks</b>	<b>Wolf</b>	<b>Kill Site</b>
Semi	5-Feb-2018	5				2		
Semi	6-Feb-2018							
Semi	12-Feb-2018	5			5			
Semi	13-Feb-2018	19		92	9	60	1	
Semi	14-Feb-2018	9	2		15	8		
Semi	15-Feb-2018	101	7	24		84		
Semi	16-Feb-2018	8	2	25	5	14		
Comp	26-Mar-2018	28		49	6	19		
Comp	27-Mar-2018	73		119	5	305		
Comp	28-Mar-2018	163	1	23		364		
Comp	29-Mar-2018	336	2	19		358	5	
	<b>Total</b>	<b>747</b>	<b>14</b>	<b>351</b>	<b>45</b>	<b>1214</b>	<b>6</b>	<b>0</b>

**Table 5.** Survey duration, weather and observation conditions for the 2017/2018 Bison Control Area surveys. Survey types are titled ‘semi’ for semi-comprehensive and ‘comp’ for comprehensive.

Survey Type	Date	Hours Flown	Temperature	Wind (Direction-knots)	Sky	Light	Intensity	Snow Cover	Days Since Last Snow
Semi	5-Feb-2018	2.9	-17.0	SW-2kts	Overcast	Flat		Complete	2
Semi	6-Feb-2018	1.2	-20.0	NA-3kts	Overcast	Flat		Complete	3
Semi	12-Feb-2018	4.0	-12.0	SW-7kts	Overcast	Flat		Complete	2
Semi	13-Feb-2018	8.1	-14.0	NNW-3kts	Overcast	Flat		Complete	3
Semi	14-Feb-2018	3.4	-25.0	SW-10kts	Clear	Bright		Complete	4
Semi	15-Feb-2018	7.0	-28.0	SW-6kts	Clear	Bright		Complete	5
Semi	16-Feb-2018	3.0	-28.0	WSW-2kts	Overcast	Flat		Complete	6
Comp	26-Mar-2018	3.9	-22.0	NW-6 kts	clear	Bright		Complete	2
Comp	27-Mar-2018	7.4	-28.0	S-2kts	Clear	Bright		Complete	3
Comp	28-Mar-2018	7.2	-28.0	NE-3kts	Clear	Bright		Complete	4
Comp	29-Mar-2018	8.7	-33.0	NA	Scattered	Bright		Complete	5
<b>Total</b>		<b>56.7</b>							

## 2017/2018 Reports and Sightings

**Table 6.** All reported bison sightings in and near the Bison Control Area, 2017/2018.

Report/Sighting Date	Details
6-Dec-2017	Fort Providence RRO received a report from hunters of five to six bison on the old winter road around km 210 on Highway 1 (Near the Highway 3 junction). No follow up investigation occurred.
7-Dec-2017	A member of the public reported a bison next to the road near Paradise Gardens (Highway 2, near Hay River), just as it was getting dark (approx. 4 pm). It was identified as a two-year old bull, alone traveling north on the west side of Highway 2. The report was investigated but no tracks or animals were located. Another investigation by the Hay River RRO determined the sighting was of a domestic cow from a nearby property.



## 2018/2019

### 2018/2019 Bison Control Area Survey Results

**Table 7.** All recorded animal observations and tracks during the 2018/2019 Bison Control Area surveys. Survey types are titled 'semi' for semi-comprehensive and 'comp' for comprehensive.

<b>Survey Type</b>	<b>Date</b>	<b>Moose Tracks</b>	<b>Moose</b>	<b>Caribou Tracks</b>	<b>Caribou</b>	<b>Wolf Tracks</b>	<b>Wolf</b>	<b>Kill Site</b>
Semi	28-Jan-2019	75	6	15		9		
Semi	29-Jan-2019	48	2	93	12	24		
Semi	30-Jan-2019	12		10	4	5		
Semi	31-Jan-2019	125	12	40	18	14		
Semi	12-Feb-2019	24	5	12		9		2
Comp	19-Mar-2019	31		1		3		
Comp	20-Mar-2019	8		27				
Comp	21-Mar-2019	2		42				
Comp	22-Mar-2019	9		7				
	<b>Total</b>	<b>334</b>	<b>25</b>	<b>247</b>	<b>34</b>	<b>64</b>	<b>0</b>	<b>2</b>



**Table 8.** Survey duration, weather, and observation conditions for the 2018/2019 Bison Control Area surveys. Survey types are titled ‘semi’ for semi-comprehensive and ‘comp’ for comprehensive.

Survey Type	Date	Hours Flown	Temperature	Wind (Direction-knots)	Sky	Light	Intensity	Snow Cover	Days Since Last Snow
Semi	28-Jan-2019	2.7	-27.0	ENE-5kts	Clear	Bright		<b>Snow Cover</b>	9
Semi	29-Jan-2019	7.4	-21.0	SE-4kts	Scattered	Flat		Complete	10
Semi	30-Jan-2019	3.2	-18.0	WNW-8kts	Overcast	Flat		Complete	0
Semi	31-Jan-2019	7.4	-23.0	WNW-9kts	Broken	Bright		Complete	1
Semi	12-Feb-2019	3.7	-19.0	S-4kts	Broken	Medium		Complete	12
Semi	19-Mar-2019	3.3	10.0	WSW-5kts	Clear	Bright		Complete	
Semi	20-Mar-2019	8.1	3.0	WSW-2kts	Clear	Bright		Low vegetation showing	
Comp	21-Mar-2019	7.8	10.0	ESE-3kts	Scattered	Bright		Low vegetation showing	
Comp	22-Mar-2019	7.1	4.0	NW-4kts	Scattered	Bright		Bare ground showing	
<b>Total</b>		<b>50.7</b>							

## 2018/2019 Bison Control Area Reports and Sightings

There were no reports or sightings of bison within or near the BCA during the 2018/2019 season.

## 2019/2020

### 2019/2020 Bison Control Area Survey Results

**Table 9.** All recorded animal observations and tracks during the 2019/2020 Bison Control Area surveys.

Survey #	Date	Moose Tracks	Moose	Caribou Tracks	Caribou	Wolf Tracks	Wolf	Kill Site
1	3-Feb-2020	25	4	2	19	9		
1	4-Feb-2020	101	6	33	7	14		
1	11-Feb-2020	24	1	74	7	13		
1	12-Feb-2020	67	12	70	4	47		
2	9-Mar-2020	91		95		70		
2	10-Mar-2020	87	5	188	18	14		
2	11-Mar-2020	42		44		29		
2	13-Mar-2020	229	6	94		104		
	<b>Total</b>	<b>666</b>	<b>34</b>	<b>600</b>	<b>55</b>	<b>300</b>	<b>0</b>	<b>0</b>

**Table 10.** Survey duration, weather, and observation conditions for the 2019/2020 Bison Control Area surveys. Survey types are titled ‘semi’ for semi-comprehensive and ‘comp’ for comprehensive.

Survey Type	Date	Hours Flow n	Temperature	Wind (Direction -knots)	Sky	Light	Intensity	Snow Cover	Days Since Last Snow
Semi	3-Feb-2020	2.9	-22.0	S-13kts	Broken	Bright	Medium	Complete	4
Semi	4-Feb-2020	5.5	-33.0	E-9kts	Clear	Bright	High	Complete	5
Semi	11-Feb-2020	3.2	-32.0	NNE-3kts	Scattered	Bright	High	Complete	1
Semi	12-Feb-2020	4	-29.0	SSE-5kts	Clear	Bright	High	Complete	2
Comp	9-Mar-2020	4.2	-6.0	S-4kts	Clear	Bright	High	Complete	3
Comp	10-Mar-2020	7.4	-11.0	NNE-NA	Partially Obscured	Bright	Medium	Complete	4
Comp	11-Mar-2020	3.0	-13.0	NNW-6kts	Scattered	Bright	Low	Complete	5
Comp	13-Mar-2020	9.2	-21.0	Calm	Partially Obscured	Bright	High	Complete	7
<b>Total</b>		<b>39.4</b>							

### 2019/2020 Bison Control Area Reports and Sightings

There were no reports or sightings of bison within or near the BCA during the 2019/2020 season.

# PUBLIC AWARENESS

During the 2018/2019 and 2019/2020 seasons public awareness actions taken were an advertisement (Figure 4) in the 2019 and 2020 NWT Explorers' Guide and 2020 Dehcho Visitor's Guide.

**Government of Northwest Territories**

## IF YOU SEE A BISON in the Bison Control Area...

Bison populations in the Slave River Lowlands and the Wood Buffalo National Park area are infected with bovine tuberculosis and brucellosis. In 1987, the Bison Control Area (BCA) was created to prevent the spread of these diseases to the healthy Mackenzie and Nahanni populations.

The BCA establishes an exclusionary zone between the diseased and disease-free populations. The objectives of the program are to detect and remove any bison within this zone and to keep bison from becoming established in it. The Department of Environment and Natural Resources monitors the Bison Control Area and public reports are an important part of the program.

Under Northwest Territories Wildlife regulations, a resident may, at any time, hunt bison within the BCA. A hunter who kills a bison in the BCA is required to report the incident as soon as possible.

If you would like more information regarding the BCA, please contact any ENR office, or visit [www.enr.gov.nt.ca](http://www.enr.gov.nt.ca).

The BCA program is jointly funded by Parks Canada and the Government of the Northwest Territories.

**Please Report!**

If you see a bison in the Bison Control Area, call 1-866-629-6438 (or the nearest ENR office) as soon as possible!

**Current range of Wood Bison in the NWT**

- Disease-free
- Disease-free
- National Parks and Reserves

\*Mackenzie and Nahanni populations are excluded from the Wood Bison population.

**Figure 3.** Advertisement published in the 2020 NWT Explorers' Guide.

## ACKNOWLEDGEMENTS

Indigenous governments and Indigenous organizations whose traditional territories overlap with the Bison Control Area (BCA) are engaged annually regarding the survey flights. We are thankful for their support and participation.

We appreciate the support for this program provided by our partner, Wood Buffalo National Park—Parks Canada Agency.

Several people were integral to the BCA program from the 2016/2017 to 2019/2020 season. Karl Cox, Madison Hurst, and Dallas Phillips led survey flights. Allicia Kelly, Ashley McLaren and Terry Armstrong coordinated aircraft procurement and provided logistic support. Local Renewable Resource Officers are the eyes and ears in communities, and take reports and investigate any sightings of bison within the BCA. Thank you to Jerry Hordal and Edward Landry.

Many thanks also go to Landa Aviation Ltd. and Hoarfrost Huskies Ltd. and their skilled pilots who flew the survey: Dave Olesen, Alexander Luckham, BJ Caron, and Darcy King.

Numerous community observers were indispensable, and we thank all of them for assisting on our surveillance flights: Irene Graham, Peter Lesage, Dwayne Klause, Suzanne Boucher, Dalton Simba, Edward Bughins, John Martel, Hawkins Tambour, Kandice Thomas, Ira Ross, Garrett Flaherty, Dustin Beck and Lyle Froelich.

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## APPENDIX A: SUMMARY OF SURVEILLANCE ACTIVITIES AND REMOVALS OF BISON FROM THE BISON CONTROL AREA (1988/1989 – 2019/2020)

Year	Shoreline Patrols	Semi- Comprehensive Surveys	Comprehensive Surveys	Hours Flown	Snow- mobile Ground Patrols	Bison Removals
1988/1989	1					
1989/1990	2					
1990/1991	2					
1991/1992		7				
1992/1993			3			9 <sup>a</sup>
1993/1994	14 <sup>b</sup>		1		23	
1994/1995	10(26) <sup>c</sup>	6(94)	1(34)	153	33	2 <sup>d</sup>
1995/1996	11(35)	3(48)	1(41)	123		3 <sup>e</sup>
1996/1997	21(62)	3(45)	1(46)	153		
1997/1998	14(43)	3(46)	1(48)	137		
1998/1999	14(43)	2(30)	1(45)	117		
1999/2000	14(42)	2(28)	1(46)	115		
2000/2001	13(40)	2(30)	1(50)	120		
2001/2002	14(42)	2(29)	1(42)	113		
2002/2003	11(25)	2(22)	1(40)	87		
2003/2004	13(31)	1(11)	1(37)	78		
2004/2005	12(29)	1(14)	1(33)	76		
2005/2006	11(23)	1(14)	1(36)	88		
2006/2007	12(38)	1(19)	1(36)	93		
2007/2008	13(40)	1(15)	1(33)	88		
2008/2009	11(33)	1(15)	1(30)	78		
2009/2010	9(27)	1(13)	1(13)	53		

Year	Shoreline Patrols	Semi-Comprehensive Surveys	Comprehensive Surveys	Hours Flown	Snow-mobile Ground Patrols	Bison Removals
2010/2011	11(30)	1(17)	1(27)	74		1 <sup>f</sup>
2011/2012	10(25)	1(16)	1(23)	64		
2012/2013	2(27)	1(36)	1(18)	81	1 <sup>g</sup>	
2013/2014	14(49)	1(13)	1(30)	92		1 <sup>h</sup>
2014/2015	10(33)	1(12)	1(34)	79		
2015/2016	8(30)	1(12)	1(30)	72		
2016/2017		2(62)		62		
2017/2018		2(57)		57		
2018/2019		2(51)		51		
2019/2020		2(39)		39		

<sup>a</sup> 17 May 1992: eight bulls shot near Point de Roche. 31 May 1992: one bull shot near Point de Roche (no lymph nodes collected). Serological testing for *Brucella* was negative for all nine bulls, no lesions consistent with tuberculosis observed on gross pathology or histopathology.

<sup>b</sup> Four patrols covered the Hay River area and extended inland to the northwest park boundary.

<sup>c</sup> Numbers in brackets represent survey hours (rounded off to the nearest hour).

<sup>d</sup> 13 October 1994: prior to the surveillance season beginning, one bison shot by hunter near the eastern boundary of the BCA. Blood and tissue samples collected but no evidence of brucellosis or tuberculosis. 8 March 1995, one cow shot by hunter along south shore of Mackenzie River. Cow had likely been wounded by wolves. Blood serum and retropharyngeal lymph nodes collected.

<sup>e</sup> 19 March 1996: three cows killed by hunter on the south shore of Mackenzie River. Blood serum (n=2) and retropharyngeal lymph nodes (n=3) collected. No serological reactors to brucella, and lymphatic tissue normal on gross examination.

<sup>f</sup> 5 January 2011: one injured young of the year female was killed by a fisherman north of Hay River on Great Slave Lake (coordinates: 60° 59' 17.1"N, 115° 51' 05.5"W). It was collected on January 12<sup>th</sup> and brought back to Fort Smith. A necropsy was performed, and wounds were found on the front left shoulder and the hindquarters and appeared to be



from a wolf attack. Retropharyngeal, submandibular, prefemoral, prescapular, popliteal and bronchial lymph nodes and tonsils were collected for testing.

<sup>g</sup> Snowmobile patrol conducted from Fort Providence to investigate bison sighting. No bison observed.

<sup>h</sup> 1 January 2014: ENR RRO in Fort Providence received a report of a bison sighting near Axe Handle Creek on Highway 1. On January 2, the RRO found bison tracks in the area. The bison had been feeding in the low areas and tracks went into a gravel pit. On January 6 at 16:30, an RRO located and destroyed the bison in the gravel pit (61.091683N, -118.709583W); the bison had been there for some time. Two local hunters assisted in tracking and skinning the young male (B2) in healthy condition.